In the Claims

The following list of pending claims replace any prior list of claims.

1. (original) A method for manufacturing a medical device, comprising:
   forming a device body;
   forming a first electrically conductive element on the device body;
   forming a first electrode on the device body; and
   operably connecting the first electrode and the first electrically conductive element.

2. (original) The method of claim 1, further comprising:
   forming a second electrically conductive element on the device body;
   forming a second electrode on the device body; and
   operably connecting the second electrode and the second electrically conductive element.

3. (original) The method of claim 2, further comprising:
   forming a device tip; and
   affixing the device tip to the device body.

4. (original) The method of claim 1, wherein the step of forming the device body comprises:
   extruding a first cylindrical body layer;
   extruding a second cylindrical body layer;
   placing the second body layer within the first body layer; and
   bonding the second body layer to the first body layer.

5. (original) The method of claim 1, wherein the step of forming the device body comprises co-extruding a first cylindrical body layer with a second cylindrical body layer.

6. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises co-extruding a first electrically conductive element within the device body.

7. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises electro-depositing a conductive material on a nonconductive portion of the device body.

8. (original) The method of claim 4, wherein the step of extruding the second cylindrical body layer comprises extruding the second cylindrical body layer over the first cylindrical body layer.

9. (original) The method of claim 4, wherein the step of forming a first electrode on the device body comprises the steps of:

forming a groove on at least a portion of the device body;

depositing conductive material within the groove in a shape of the first electrode; and

in the event that a portion of the conductive material extends beyond an upper surface of the groove, removing the portion of conductive material.

10. (original) The method of claim 9, wherein the step of forming a groove on at least a portion of the device body is performed simultaneously with the step of forming the device body.

11. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises the steps of:

co-extruding electrically conductive material with the first cylindrical body layer; and

removing a portion of the first cylindrical body layer to expose at least a portion of the electrically conductive material.

12. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises:

coating a surface of the device body with an electrically conductive material; and

selectively removing at least a portion of the electrically conductive material from the device body.

13. (original) The method of claim 12, wherein the step of selectively removing at least a portion of the electrically conductive material from the device body comprises exposing at least a portion of the electrically conductive material to a chemical solvent.

14. (original) The method of claim 12, wherein the step of selectively removing at least a portion of the electrically conductive material from the device body comprises vaporizing at least a portion of the electrically conductive material with a laser.

15. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises extruding a conductive layer across at least a portion of the device body.

16. (original) The method of claim 15, further comprising:

extruding a second device body longitudinally encasing the device body and extruded conductive layer; and

extruding a second conductive layer across at least a portion of the second device body.

17. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises:

feeding wire from a spool to a mandrel under tension;

positioning the wire with respect to an ultimate location along the device body means of the mandrel; and

co-extruding the wire with the device body.

18. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises:

forming a groove on an exterior surface of the device body; and

placing a wire within the groove.

19. (original) The method of claim 16, further comprising the steps of:

forming a tip structure; and

affixing the tip structure to the device body.

20. (original) The method of claim 19, wherein the step of forming a tip structure comprises:

plating a metal electrode over a molded non-conductive tip shape;

forming a via in the tip shape; and

electrically connecting a trace to the metal electrode through the via.

21. (original) The method of claim 4, further comprising the step of affixing an adapter to a distal end of the device body.

22. (original) The method of claim 21, wherein the step of affixing an adapter to a distal end of the device body comprises:

aligning an adapter trace with the first electrically conductive element with an adapter trace; and

inserting a portion of the adapter into the distal end of the device body such that the adapter trace and electrically conductive element are operably connected.

23. (withdrawn) A method for manufacturing a medical device, comprising:

forming a skeletal structure comprising at least one electrode and at least one trace;

overmolding a nonconductive shaft over the skeletal structure; and

removing a portion of the nonconductive shaft to expose a portion of the skeletal structure.

24. (withdrawn) A method for manufacturing a medical device, comprising:

extruding a first cylindrical body;

extruding a second cylindrical body;

forming a first electrically conductive element on the first cylindrical body; forming a first electrode on the first cylindrical body;

forming a second electrically conductive element on the second cylindrical body;

forming a second electrode on the first cylindrical body;

operably connecting the second electrode and the second electrically conductive element;

operably connecting the first electrode and the first electrically conductive element;

placing the second cylindrical body within the first cylindrical body; and

bonding the second cylindrical body to the first cylindrical body.

25. (withdrawn) The method of claim 24, further comprising the step of:

aligning the first and second electrically conductive elements in a plane; and

separating the first and second electrically conductive elements with a nonconductive layer.